**LESSON #4**

Class: Biology

Unit: The Cell

Topic: Even though we’re different, we’re still cells!

**Instructional Objectives: Students will be able to…**

1.) Visually identify a Eukaryotic and a Prokaryotic cell.

2.) Describe the differences between a Eukaryote and a Prokaryote and give examples

3.) List some environments you would find Eukaryotic and Prokaryotic cells.

4.) Explain the difference between multicellular and unicellular organisms and give examples.

**Time Activities**

9:00-9:05 Watch video clip on eukaryotic and prokaryotic cells and on multicellular and unicellular organisms.

* Euk/prok cells <http://www.youtube.com/watch?v=vPT0kKm3Cm0&feature=related> )
* Multi/unicellular: <http://www.youtube.com/watch?v=qEHQbjido9I>

9:05 -9:15 Discuss the videos asking the students to provide examples of how Prokaryotes and Eukaryotes are similar and different. Put their responses on the board in the form of a Venn diagram and ask for examples of Eukaryotic and Prokaryotic organisms. Discuss multi/unicellular organisms and if they can be both eukaryotic and prokaryotic. Show and provide examples.

9:15-9:20 I will then display a slide show containing various types of Eukaryotic and Prokaryotic cells, asking the students as we go students to indicate the type of cell being shown. This again is another tool for me to see where there might be some issues that need to be addressed.

9:20 – 9:43 The class will then break up into their lab groups. Each group will have 4 labeled slides with a corresponding worksheet. After viewing the slide they will draw what they see and at what magnification and indicate whether it is prokaryotic or eukaryotic and whether it is multicellular or unicellular. Explanations are required as to why they labeled them as they did.

9:43 – 9:45 Homework will be assigned with is to read page 122 and section 5.3. They will then choose 1 of the 3 extreme environments listed they are home to prokaryotes. They will then give 1 example of a prokaryote that lives in that environment and draw and label it, including what it is along with scientific name. They will then describe the environment and what makes it extreme and some characteristics of the organism that allows it to survive.

**Assignment:**

* Drawing and description of a prokaryote and the extreme environment in which it is found.
* Textbook

**Activity Materials:**

* Plain white paper
* Crayons or Markers
* Laptop
* Projector
* 5 microscopes
* Worksheet

**Resources for lesson:**

* Video clips
* Slides of Prokaryotic and Eukaryotic cells and muli/unicellular organisms.
* textbook